

Title (en)  
Image forming apparatus

Title (de)  
Bilderzeugungsgerät

Title (fr)  
Appareil de formation d'images

Publication  
**EP 0789287 B1 20030723 (EN)**

Application  
**EP 97101493 A 19970130**

Priority  
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Abstract (en)  
[origin: EP0789287A2] An image forming apparatus includes a photoreceptor drum (15) having a toner image formed on its surface, a transfer drum (11) having a dielectric layer (28), a semiconductive layer (27) and a conductive layer (26) arranged orderly, a power source section (32) applying a predetermined voltage to the conductive layer (26), and a ground roller (12) which is grounded and comes in contact with the surface of the dielectric layer (28) through a transfer paper (P). In addition, in the image forming apparatus, a foaming body having elastic property is used for the semiconductive layer (27), and a diameter of foams in the semiconductive layer (27) is controlled within the range of between 200  $\mu\text{m}$  and 400  $\mu\text{m}$ . Alternatively, the average micro-gap (which is obtained by equalization of a micro-gap formed between the semiconductive layer (27) and the dielectric layer (28)) may be controlled within the range of between 20  $\mu\text{m}$  and 50  $\mu\text{m}$ . Consequently, a stable electrostatic attraction of the transfer paper (P) to the transfer drum (11) is achieved, and unsatisfactory transfer of the toner image onto the transfer paper (P) is prevented. The image forming apparatus realizes an excellent image formation onto the transfer paper, and the arrangement capable of reduction of the manufacturing cost.

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IPC 8 full level  
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